

ship July 12.

Work Order ID 147208

147208

Page 1

Tuesday, June 07, 2016 11:51:04 AM

Item ID: 647.7306 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: EC135 T2/P2 Cable Cutters (Removable Provisions Only)
 Start Date: 6/21/2016 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 7/12/2016 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: **DAS 21** Date: 16-07-20 Tooling: Date:
9-89 QC: Date: SPC (Y/N): Date:
 Run Start ***NR1***
 Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr								
647.7300	B		DAS 21	9-89	JUN 23 2016			DAS 21	9-89

100 DOCUMENT CONTROL 0.00
100
 DC Memo 0.00
 Doc.Control -USB or Paperwork Photocopy bluefile & type labels per PPP 647.7306

110 Pick Kit 0.00
110
 Packaging Memo 0.00
 Packaging

120 QC4- 100% Inspect kits for completeness 0.00
120
 QC Memo 0.00
 Quality Control

JUL 12 2016

JUN 28 2016

JUL 12 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Work Order ID 147208***147208***

Page 2

Tuesday, June 07, 2016 11:51:04 AM

Item ID: 647.7306 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: EC135 T2/P2 Cable Cutters (Removable Provisions Only)
Start Date: 6/21/2016 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 7/12/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00				DAS 27 9-89			
130	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP 647.7306								
Packaging	Location : FG109								
	<i>sold</i>								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

JUL 12 2016

DAS
21
9-89 JUL 12 2016

DAS
21
9-89 JUL 12 2016

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : _____							

Picklist Print

Tuesday, June 07, 2016 11:51:03 AM

Page 1

Work Order ID: 147208

147208

Parent Item: 647.7306

647 7306

Parent Item Name: EC135 T2/P2 Cable Cutters (Removable Provisions Only)

Start Date: 6/21/2016

Required Date: 7/12/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 16.04.27 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

647.7501		Manufactured	No				Each	0.0000		1			DAS 6 9-89
----------	--	--------------	----	--	--	--	------	--------	--	---	--	--	------------------

647 7501

Lower Cutter Assembly

647.7702

647 7702

Strut Assembly

647.7701

647 7701

Strut Assembly

647.0112

647 0112

Strut Bracket

Manufactured No

Manufactured No

Manufactured No

Location

Loc Qty

Loc Code

CCK107

14

140968

14

CCK108A

58

142661

58

601.3011

Manufactured No

601 3011

P-Seal

Location

Loc Qty

Loc Code

CCK095

50

91709

50

CCK099

27.5

M130388

27.5

**

**

**

**

**

147209

146723

146722

JUL 08 2016

JUN 28 2016

DAS

6

9-89

DAS
27
9-89

DAS
38
9-89

DAS
38
9-89

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause				FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : _____							

Picklist Print

Page 2

Tuesday, June 07, 2016 11:51:03 AM

Work Order ID: 147208

147208

Parent Item: 647.7306

647 7306

Parent Item Name: EC135 T2/P2 Cable Cutters (Removable Provisions Only)

Start Date: 6/21/2016

Required Date: 7/12/2016

Start Qty: 1.00

Required Qty: 1.00

MS21266-2N

Purchased

No

Each

56.0000

1

MS21266-2N

Grommet

**

DAS 26 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST294

56

123900

40

M130388

16

AN44-12A

Purchased

No

Each

28.0000

12

AN44-12A

Eyebolt

**

DAS 26 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST339

28

124131

8

124263

20

AN665-34R

Purchased

No

Each

19.0000

4

AN665-34R

Clevis

**

DAS 26 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST330

19

M134202

19

AN3-11A

Purchased

No

Each

189.0000

4

AN3-11A

Bolt

**

DAS 26 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

over003

100

m134852

100

ST349

89

m134167

89

JUN 28 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date: _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval				
Description Work Order Deviation				Disposition				Completed By			
								Lead hand / Supervisor Approval Verification			
								QC / QA Coordinator Approval			
Root Cause				FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
OTHER : _____											

Picklist Print

Tuesday, June 07, 2016 11:51:03 AM

Work Order ID: 147208

147208

Parent Item: 647.7306

647 7306

Parent Item Name: EC135 T2/P2 Cable Cutters (Removable Provisions Only)

Start Date: 6/21/2016

Required Date: 7/12/2016

Start Qty: 1.00

Required Qty: 1.00

AN4C7A Purchased No

Each 96.0000 4

AN4C7A

BOLT

**

DAS 26
6 26
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

OVER002

20

m133523

20

ST345

76

m133990

16

m134861

60

MS21042-08 MS21042L08

Purchased No

Each 33.0000

MS21042-08

USE MS21042L08

**

DAS 26
6 26
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST304

25

122815

25

ST306

8

m130388

8

MS21042-3 MS21042L3

Purchased No

Each 22.0000

MS21042-3

Nut / use MS21042L3

**

DAS 26
6 26
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST304

22

M129682

22

JUN 28 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Tuesday, June 07, 2016 11:51:03 AM

Page 4

Work Order ID: 147208

147208

Parent Item: 647.7306

647 7306

Parent Item Name: EC135 T2/P2 Cable Cutters (Removable Provisions Only)

Start Date: 6/21/2016

Required Date: 7/12/2016

Start Qty: 1.00

Required Qty: 1.00

MS21042L4

Purchased

No

Each

1,824.000

4

MS21042L 4

Locknut

**

DAS
6
9-89

DAS
26
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

181

m133769

181

OVER007

1000

m134861

1000

ST303

549

m134762

549

ST305

94

m130922

94

AN316C4R

Purchased

No

Each

43.0000

4

AN316C4R

NUT

**

DAS
6
9-89

DAS
26
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST331

43

m133234

35

m133523

8

MS27039-08-13

Purchased

No

Each

226.0000

4

MS27039-08-13

Screw

**

DAS
6
9-89

DAS
26
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST278

226

124326

222

m4067

4

JUN 28 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Tuesday, June 07, 2016 11:51:03 AM

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Work Order ID: 147208

147208

Parent Item: 647.7306

647 7306

Parent Item Name: EC135 T2/P2 Cable Cutters (Removable Provisions Only)

Start Date: 6/21/2016

Required Date: 7/12/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149FN832P

Purchased

No

Each

1,989.000

23

NAS1149FN832P

Washer

**

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

457

M133316

16

M133769

441

ST260a

1200

M134257

1200

ST264

332

M133709

332

Each

2,269.000

**

DAS
6
9-89
DAS
26
9-89

NAS1149F0332P

Purchased

No

NAS1149F0332P

Washer

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

312

m133709

312

ST262

1957

m134257

37

m134676

1920

Each

1,012.000

**

DAS
6
9-89
DAS
26
9-89

NAS1149F0432P

Purchased

No

NAS1149F0432P

WASHER

DAS
27
9-89

Location

Loc Qty

Loc Code

ST262

891

M134502

891

st268

121

M132677

121

JUN 28 2016

DAS
6
9-89
DAS
26
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

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Page 6

Work Order ID: 147208

147208

Parent Item: 647.7306

647 7306

Parent Item Name: EC135 T2/P2 Cable Cutters (Removable Provisions Only)

Start Date: 6/21/2016

Required Date: 7/12/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149F0532P

Purchased

No

Each

2,438.000

2

NAS1149F0532P

Washer

**

DAS
6
9-89

DAS
26
9-89

Location

Loc Qty

Loc Code

ST260a

600

m133725

600

ST262

1838

18057

1838

Each

22.0000

1

**

DAS
6
9-89

DAS
26
9-89

600.1012

Purchased

No

600 1012

Sealant PR1425B2 (#654 sem)

Location

Loc Qty

Loc Code

cck017

21

m134167

3

m134249

8

m134634

10

cck018

1

m131364

1

Each

14.0000

10/30/2015

1

**

DAS
6
9-89

DAS
26
9-89

601.2045

Purchased

No

601 2045

RTV (LOCTITE 598)McMaster p/n: 6641A41

Location

Loc Qty

Loc Code

CCK096

6

m133588

6

GA

8

m134260

8

DAS
27
9-89

JUN 7 8 2016

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Shop Packet Print

Page 6

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Skid-tube ☐ Cross tube ☐ Water Jet ☐ Engineering ☐ Scrap ☐ Machining ☐ Small Fab ☐ Prod. Eng. Coord. ☐ Quality ☐ Use-as-is ☐ Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐ Suspected Unapproved ☐ Large Fab ☐ Composite ☐ Supplier ☐		AGAINST DEPARTMENT/PROCESS					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
L								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause				FAULT CATEGORY					
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐				Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐					
Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐									
OTHER : ☐									

Picklist Print

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Page 7

Work Order ID: 147208

147208

Parent Item: 647.7306

647 7306

Parent Item Name: EC135 T2/P2 Cable Cutters (Removable Provisions Only)

Start Date: 6/21/2016

Required Date: 7/12/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149F0463P

Purchased

No

Each

858.0000

NAS1149F0463P

Washer

DAS
27
9-89

Location

Loc Qty

Loc Code

ST262

858

m127832

858

647.1404

Manufactured

No

Each

0.0000

647 1404

Upper Cutter Assembly

MS27039-08-27 9-89

Purchased

No

Each

40.0000

MS27039-08-27

Screw

DAS
27
9-89

Location

Loc Qty

Loc Code

ST277

40

m134702

40

MS21042L08

Purchased

No

Each

991.0000

MS21042L08

Nut

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

310

m133134

3

m134063

307

ST303

537

m133922

37

m134574

200

m134654

300

ST308

144

m134376

144

647.1702

Manufactured

No

Each

0.0000

647 1702

Skid Deflector Assembly

DAS
27
9-89

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Page 7

DAS
6
9-89

DAS
26
9-89

DAS
6
9-89

DAS
26
9-89

DAS
6
9-89

DAS
26
9-89

DAS
6
9-89

DAS
26
9-89

JUN 28 2016

JUL 08 2016

DAS
6
9-89

DAS
26
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____					
Misidentified ☐	☐ Past Due						

Picklist Print

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Page 8

Work Order ID: 147208

147208

Parent Item: 647.7306

647 7306

Parent Item Name: EC135 T2/P2 Cable Cutters (Removable Provisions Only)

Start Date: 6/21/2016

Required Date: 7/12/2016

Start Qty: 1.00

Required Qty: 1.00

LN9025-0820K

Purchased No

Each 32.0000

I N9025-0820K

Lock Tab Washer

DAS
27
9-89

Location

Loc Qty

Loc Code

ST563

32

M128007

32

LN9037-08018

Purchased No

Each 0.0000

I N9037-08018

Screw
93635A212 27
9-89

Location

Loc Qty

Loc Code

ST558

42

m134700

42

601.3902

Manufactured No

Each 0.0000

601 3902

Eye Bolt

DAS
27
9-89

JUN 23 2016

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

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NOTES: UNLESS OTHERWISE SPECIFIED

1 AFTER INSTALLATION, APPLY F/N 90 A/R TO FILL GAPS AND FILLET EDGES.

2 APPLY F/N 91 TO FAYING SURFACES.

3 DELETED.

4 MATCH DRILL HOLES THROUGH F/N 26 or F/N 98 AND FUSELAGE.

5 SHIM GAP BETWEEN F/N 1 & 26 AS NEEDED.

6 AT CUSTOMERS OPTION, INSTALL F/N 96 BY MATCH DRILLING ONTO F/N 1 FOR KIT P/N 647.7301 or F/N 99 FOR KIT P/N 647.7304.

7 647.7301 INSTALLATION FOR EC135.

8 647.7304 INSTALLATION FOR EC135 T2/P2.

9 EXCEPT WHERE NOTED, INSTALLATION FOR 647.7304 SAME AS 647.7301.

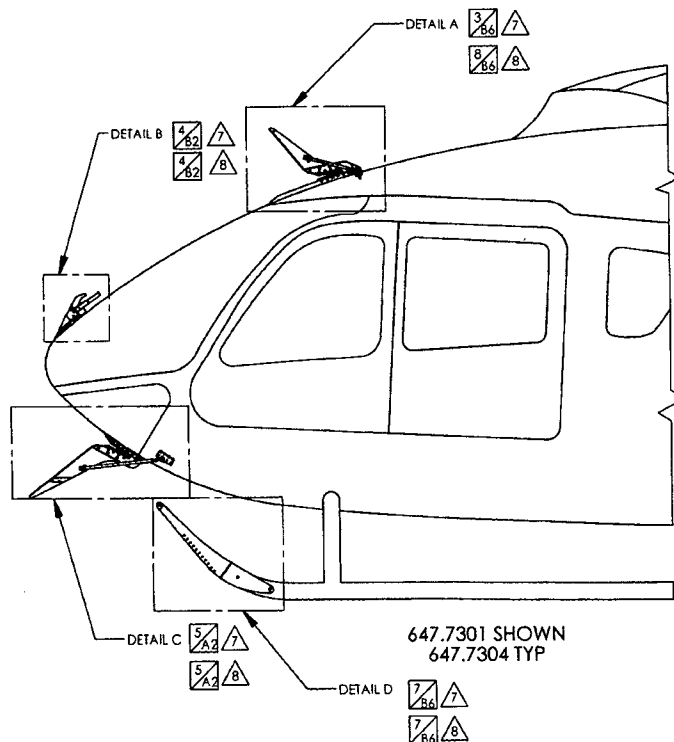
			8		8	95	601.1097	WASHER	NAS1149F0463P	
	1	1		1	1	94	647.7919	SHIM		
	1	1		1	1	93	600.0990	MAGNOBOND 6398 PART A		
	1	1		1	1	92	600.0991	MAGNOBOND 6398 PART B		
1	1	1	1	1	1	91	601.2045	RTV	LOCITE 598	
1	1	1		1	1	90	600.1012	SEALANT	PP-1425 CLASS B	
3	3			3	3	89	601.2375	WASHER		
2	3	4	2	3	4	88	601.3126	WASHER	NAS1149F0332P	
12		12	8		8	87	601.3663	WASHER	NAS1149C0432R	
8	77	85	12	74	86	86	601.1607	WASHER	NAS1149F0332P	
23	2	25	12	2	14	85	601.2764	WASHER	NAS1149F14832P	
2	2			2	2	84	601.3136	CHERRY RIVET	CR3212-5-6	
8	8			8	8	83	601.3215	CHERRY RIVET	CR3222-5-3	
8	8			8	8	82	601.3216	CHERRY RIVET	CR3222-4-3	
12	12			12	12	81	601.2481	CHERRY RIVET	CR3213-5-4	
16	16			16	16	80	601.2020	CHERRY RIVET	CR3213-5-3	
17	17			17	17	79	601.2991	CHERRY RIVET	CR3213-4-6	
8	8			8	8	78	601.1183	CHERRY RIVET	CR3213-4-5	
16	16			16	16	77	601.1915	CHERRY RIVET	CR3213-4-4	
24	24			24	24	76	601.0790	CHERRY RIVET	CR3213-4-3	
4	4			4	4	75	601.1604	CHERRY RIVET	CR3213-4-2	
4	4			4	4	74	601.1983	NUTPLATE RIVET	CCR27455-3-03	
24	24			24	24	73	601.2207	NUTPLATE RIVET	CCR26455-3-03	
3	3			3	3	72	601.2999	SCREW		
5	5			6	6	71	601.2829	SCREW	MS24694554	
2	2			2	2	70	601.1954	SCREW	MS27039-1-17	
4	4			4	4	69	601.2637	SCREW	MS27039-1-16	
1	1			1	1	68	601.3012	SCREW	MS27039-1-15	
4	4			4	4	67	601.1622	SCREW	MS27039-1-14	
2	2			2	2	66	601.1953	SCREW	MS27039-1-12	
6	6			6	6	65	601.1365	SCREW	MS27039-1-10	
12	12			12	12	64	601.3069	SCREW	MS27039-1-09	
3	3			3	3	63	601.2198	SCREW	MS27039-1-07	
			2		2	62	601.3137	SCREW	MS27039-0816	
4		4			4	61	601.2988	SCREW	MS27039-0813	
1	1			1	1	60	601.2525	SCREW	MS27039-0807	
4	4			4	4	59	601.3127	LOCKNUT	MS21042L5	
2	2			2	2	58	647.8512	INSERT		
4	4			4	4	57	647.8511	INSERT		
20	20			18	18	56	647.8510	INSERT		
4	4			4	4	55	601.3128	NUT	AN316C4R	
4		4	8		8	54	601.3209	LOCKNUT	MS21042L4	
4	31	35	4	30	34	53	601.2943	LOCKNUT	MS21042L3	
4	1	5	6	1	7	52	601.2973	LOCKNUT	MS21042L2	
			4		4	51	601.3002	BOLT	NAS6604-66	
			4		4	50	601.3130	BOLT	NAS6603-16	
			4		4	49	601.1500	BOLT	NAS6603-12	
4		4	4		4	48	601.2669	BOLT	AN4C7A	
	1	1		1	1	47	601.1324	BOLT	AN4CH6A	
4		4		4	4	46	601.2826	BOLT	AN3-11A	
2	2			2	2	45	601.2823	BOLT	AN3-4A	
12	12			12	12	44	600.0795	NUTPLATE	MS21047-3	
2	2			2	2	43	601.3004	CAMLOC STUD		
2	2			2	2	42	601.3005	CAMLOC RETAINER		
2	2			2	2	41	601.3006	CAMLOC RECEPTACLE		
4		4	4		4	40	601.3119	CLEVIS	AN665-34R	
7306	7305	7304	7303	7302	7301	FIND #	PART #	DESCRIPTION	MATL	SPEC

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
N/C	LAST PROTOTYPE REVISION: PR4		
N/C	INITIAL RELEASE	01/13/09	P. BRAVO
A	INCORPORATED ECHS 02730, 03000, 03044, 03066	02/16/11	P. BRAVO
B	INCORPORATED ECHS 03025	03/09/16	P. BRAVO

2		2	2		2	39	601.3120	EYE BOLT	AN44-12A	
			2		2	38	601.3121	EYE BOLT	AN44-5A	
1	1	1	1	1	1	37	601.3007	GROMMET	MS21266-2N	
1	1	1	1	1	1	36	601.3011	P-SEAL		
	1	1		1	1	35	647.3201	GROUNDING CABLE ASSY		
			2	2	4	34	647.2511	NUT		
				4	4	33	647.2510	SLEEVE		
	13	13		13	13	32	647.1812	SHIM		
2	2			2	2	31	647.1811	SPACER		
1	1			1	1	30	647.1602	DOUBLER ASSY		
1	1			1	1	29	647.1914	BRACKET		
1	1			1	1	28	647.7822	EYE BOLT FITTING RH		
1	1			1	1	27	647.7821	EYE BOLT FITTING LH		
				1	1	26	647.7818	MOUNTING CHANNEL		
				1	1	25	647.7820	CROSS BRACKET AFT		
1	1			1	1	24	647.7819	CROSS BRACKET FWD		
1	1			1	1	23	647.7918	BRACKET		
1	1			1	1	22	647.7917	BRACKET		
2	2			2	2	21	647.7916	BRACKET		
1	1			1	1	20	647.7915	BRACKET		
1	1			1	1	19	647.7914	BRACKET		
2	2			2	2	18	647.7913	DOUBLER		
4	4			4	4	17	647.7912	CLIP		
2	2			2	2	16	647.7911	BRACKET		
2	2			2	2	15	647.7910	ANGLE BACKET		
4	4			4	4	14	647.0112	STRUT BRACKET		
1	1			1	1	13	647.1810	NOSE DOOR DOUBLER		
1	1			1	1	12	647.1818	NOSE DOOR SPACER		
2	2			2	2	11	647.7701	STRUT ASSY		
2	2			2	2	10	647.7702	STRUT ASSY		
1	1			1	1	9	647.1815	GUSSET, RH		
1	1			1	1	8	647.1814	GUSSET, LH		
1	1			1	1	7	647.1915	SUPPORT ANGLE		
1	1			1	1	6	647.1913	TEE		
1	1			1	1	5	647.1610	WIPER DEFLECTOR, FWD		
1	1			1	1	4	647.1601	WIPER DEFLECTOR ASSY, AFT		
			2		2	3	647.1701	SKID DEFLECTOR ASSY		
1	1			1	1	2	647.7501	LOWER CUTTER ASSY		
			1		1	1	647.7401	UPPER CUTTER ASSY		
X							647.7306	T2/P2 REMOVABLE PROVISIONS KIT		
	X						647.7305	T2/P2 FIXED PROVISIONS KIT		
		X					647.7304	EC135 T2/P2 CABLE CUTTERS KIT		
			X				647.7303	REMOVABLE PROVISIONS KIT		
				X			647.7302	FIXED PROVISIONS KIT		
					X		647.7301	EC135 CABLE CUTTERS KIT		
7306	7305	7304	7303	7302	7301	FIND #	PART #	DESCRIPTION	MATL	SPEC

QTY		PARTS LIST	
NEXT ASSY (S)		OPTIONAL DATE (EEO-DA-17) 1/2/2009 DRAWN BY C. GUAN A. GUAN D. MARKER DRAWING APPROVAL P. BRAVO 01/13/09 CONTRACT NO.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ±0.1 2 PLACE DECIMALS ±0.05 1 PLACE DECIMALS ±0.005		DART 3030 ENTERPRISE CT., SUITE A VISTA, CA, 92081 (760)-724-5300 APICAL INDUSTRIES INC. DBA DART AEROSPACE EC135 CABLE CUTTERS KIT SITE CAGE CODE: 07M26 DWG. NO: 647.7300 SCALE: NONE SHEET: 1 OF 8	

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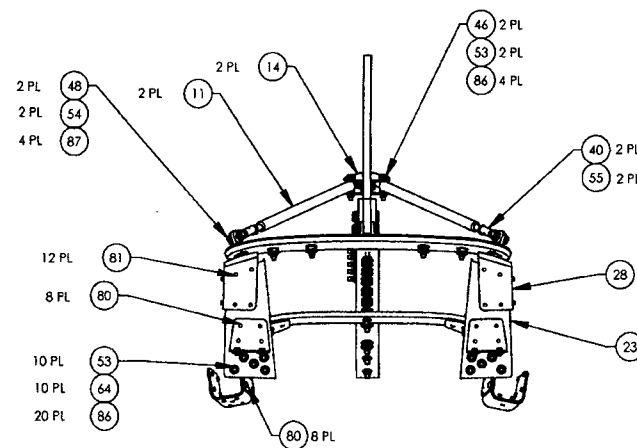
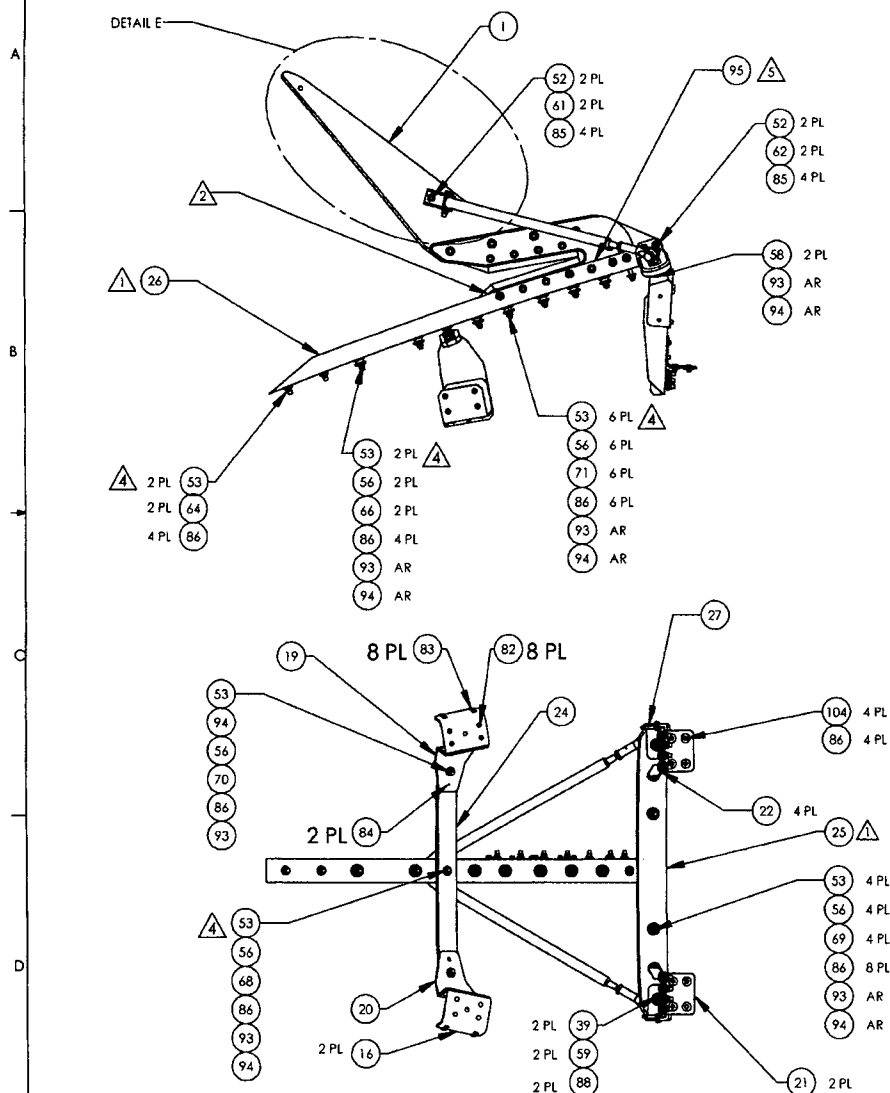
2		2				110	601.3902	EYE BOLT		
	2	2				109	601.2910	SCREW	MS27039-1-18	
4		4				108	601.3963	BOLT	93635A212	
8		8				107	601.3654	BOLT	LN9037-08018	
8		8				106	601.3655	LOCK WASHER	LN9025-0820K	
2		2				105	647.1702	SKID DEFLECTOR ASSY		
	8	8		8	8	104	601.3214	CHERRY RIVET	CR3523-5-3	
	24	24		24	24	103	601.3213	CHERRY RIVET	CR3523-4-4	
	4	4		4	4	102	601.3212	CHERRY RIVET	CR3523-4-3	
5		5				101	601.1541	LOCKNUT	MS21042106	
5		5				100	601.3962	SCREW	MS27031-0837	
1		1				99	647.1404	CUTTER ASSY (UPPER)		
	1	1				98	647.2114	UPPER U CHANNEL		
	1	1				97	647.7823	CROSS BRACKET AFT		
1		1	1		1	96	647.5701	GPS MOUNT KIT		
7306	7305	7304	7303	7302	7301	FIND #	PART #	DESCRIPTION	MAT'L	SPEC.

ORIGINAL DATE
11/04/09
DRAWN BY
A. OLIVAN
CHECKED BY
D. BARBER
DRAWING APPROVAL
P. BRAYO
01/13/10
CONTRACT NO.

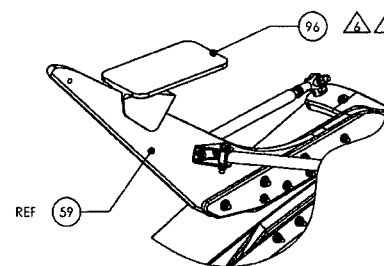
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
2 PLACE DECIMALS .001
3 PLACE DECIMALS .0005
ANGLES ± 3°

DART 3030 ENTERPRISE CT., SUITE A VISTA, CA 92081 (760)-724-5300
APICAL INDUSTRIES, INC. DBA DART AEROSPACE
EC135 CABLE CUTTERS KIT
SER CAGE CODE DWG. NO. REV.
B 07M26 647.7300 B
SCALE NONE 1 SHEET 2 OF 8

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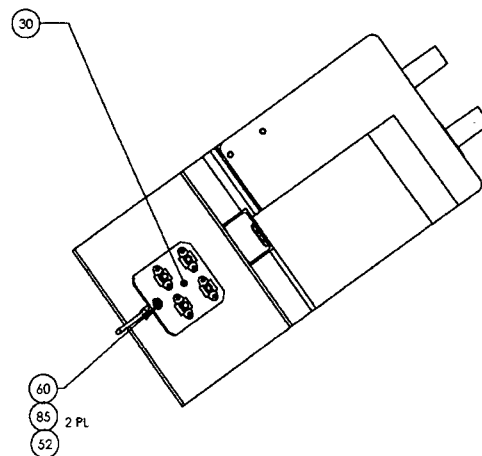
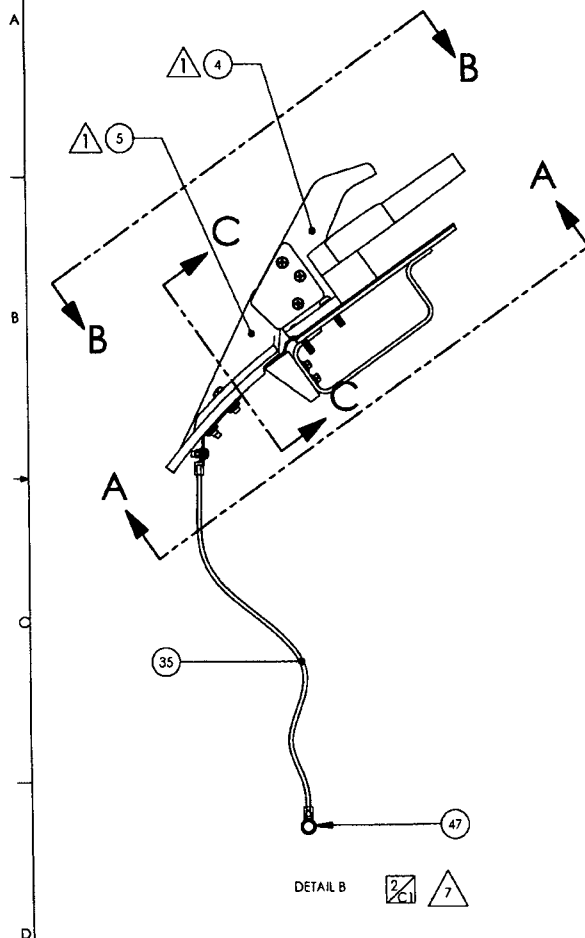
DETAIL A



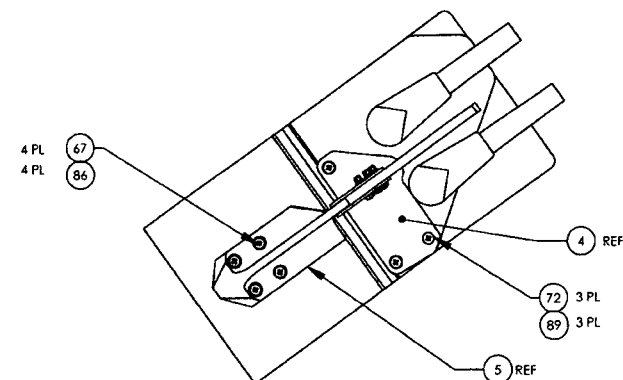
DETAIL E
TYPICAL GPS MOUNT KIT INSTALLATION

ORIGINAL DATE 11/24/00		3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300	
DRAWN BY A. GUAN	CHECKED BY D. BARKER	DART AEROSPACE APICAL INDUSTRIES, INC. DBA DART AEROSPACE	
DRAWING APPROVAL P. BRAY	DATE 01/15/01	EC135 CABLE CUTTERS KIT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SHEET B. 07M26	REV. B
SCALE NONE		SHEET 3 OF 8	

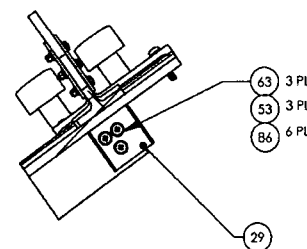
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES DBA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES DBA DART AEROSPACE IS PROHIBITED.



SECTION A-A



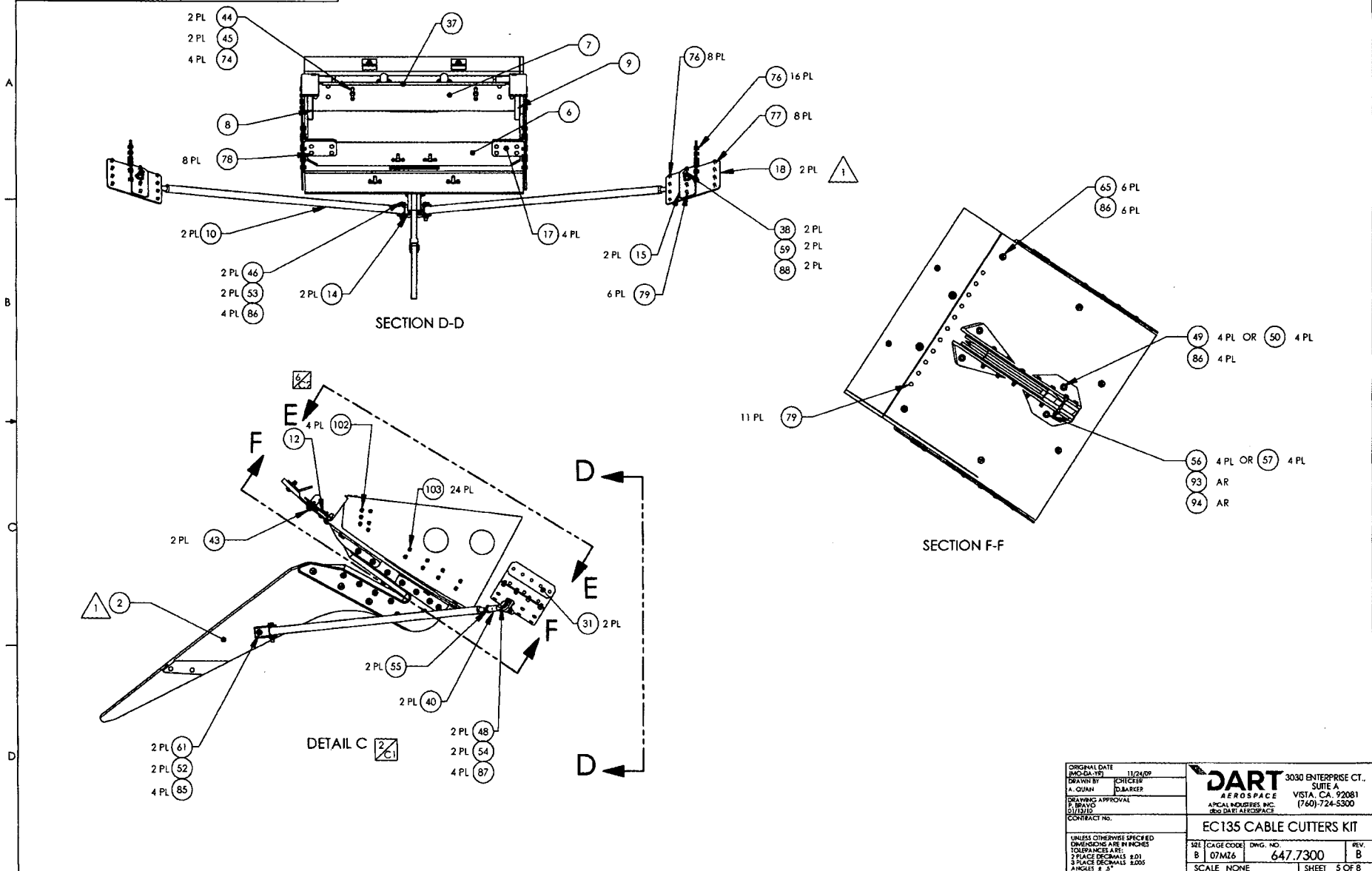
SECTION B-B



SECTION C-C

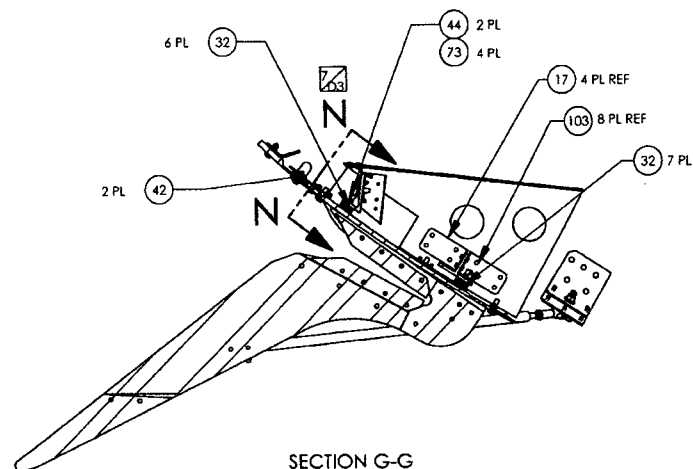
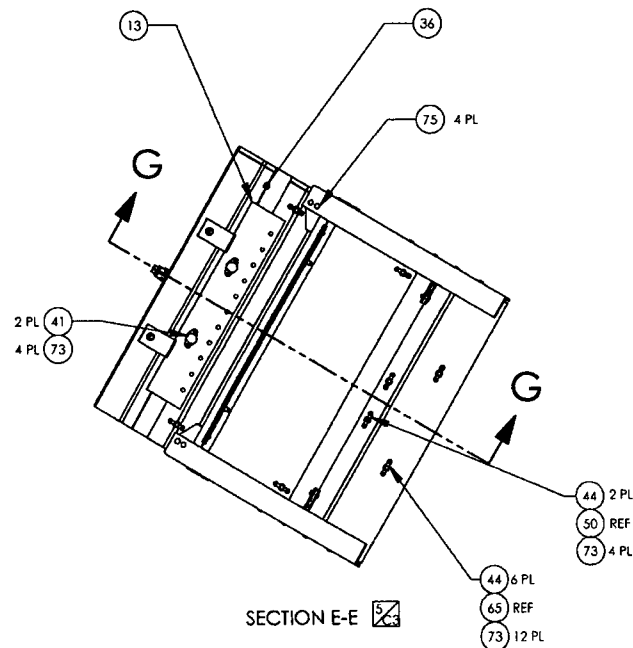
ORIGINAL DATE (M-D-Y)		11/24/09	DART 3030 ENTERPRISE CT., AEROSPACE SUITE A VISTA, CA 92081 (760)-724-5300 APICAL INDUSTRIES INC. DBA DART AEROSPACE	
DRAWN BY	CHECKER			
A. GUAN	D. BARBER			
DRAWING APPROVAL			EC135 CABLE CUTTERS KIT	
P. BAYO				
5/13/10			UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°	
CONTRACT NO.				
SHEET	CAGE CODE	DMG. NO.	REV.	
B	07M126	647.7300	B	
SCALE NONE			SHEET 4 OF 8	

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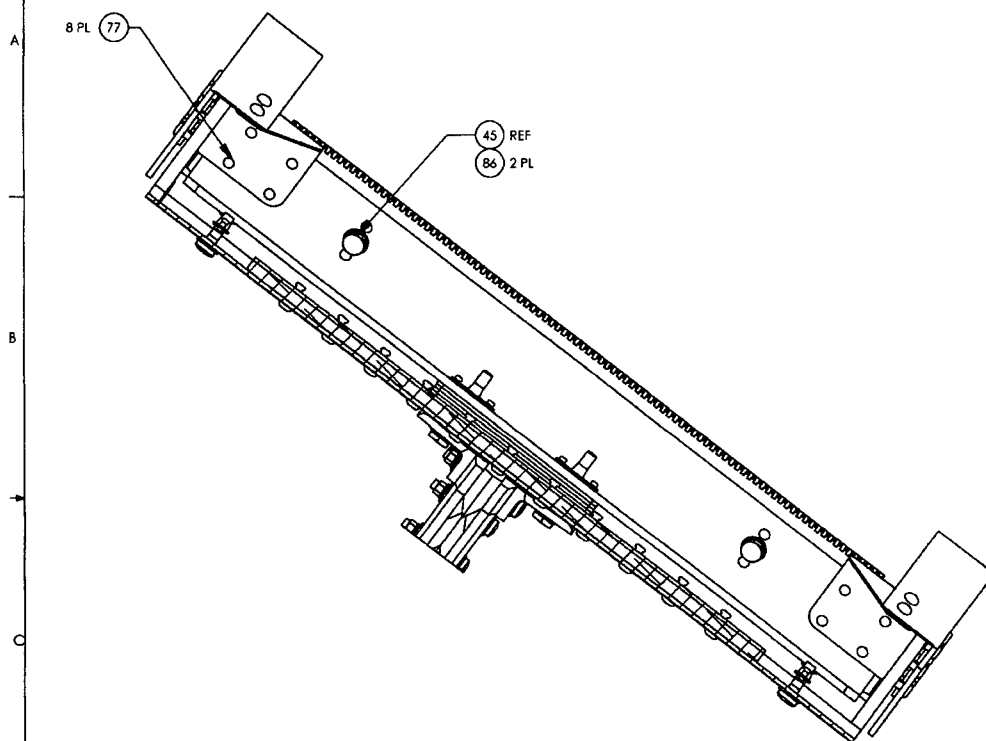
ORIGINAL DATE JMD-EX-101 11/24/09		3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300	
DRAWN BY A. GUNN		DART AEROSPACE APICAL INDUSTRIES INC. DBA DART AEROSPACE	
DRAWING APPROVAL S. BRAYO		EC135 CABLE CUTTERS KIT	
CONTRACT NO.		SIZE B	REV. B
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		CAGE CODE 07M26	DWG. NO. 647.7300
SCALE NONE		SHEET 5 OF 8	

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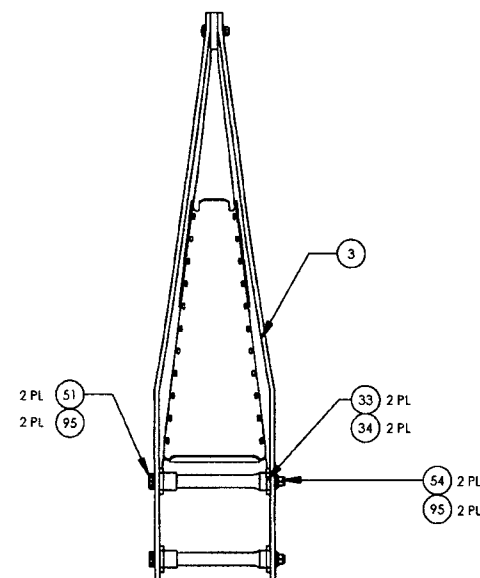
ORIGINAL DATE 11/24/09		3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300	
DRAWN BY A. CHAN		DART AEROSPACE	
DRAWING APPROVAL P. BRADY 5/1/10		APICAL INDUSTRIES, INC. DBA DART AEROSPACE	
CONTRACT No.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°			
SHEET 8	CAGE CODE 07M26	DWG. NO. 647.7300	REV. B
SCALE NONE		SHEET 6 OF 8	

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SECTION N-N

INBOARD

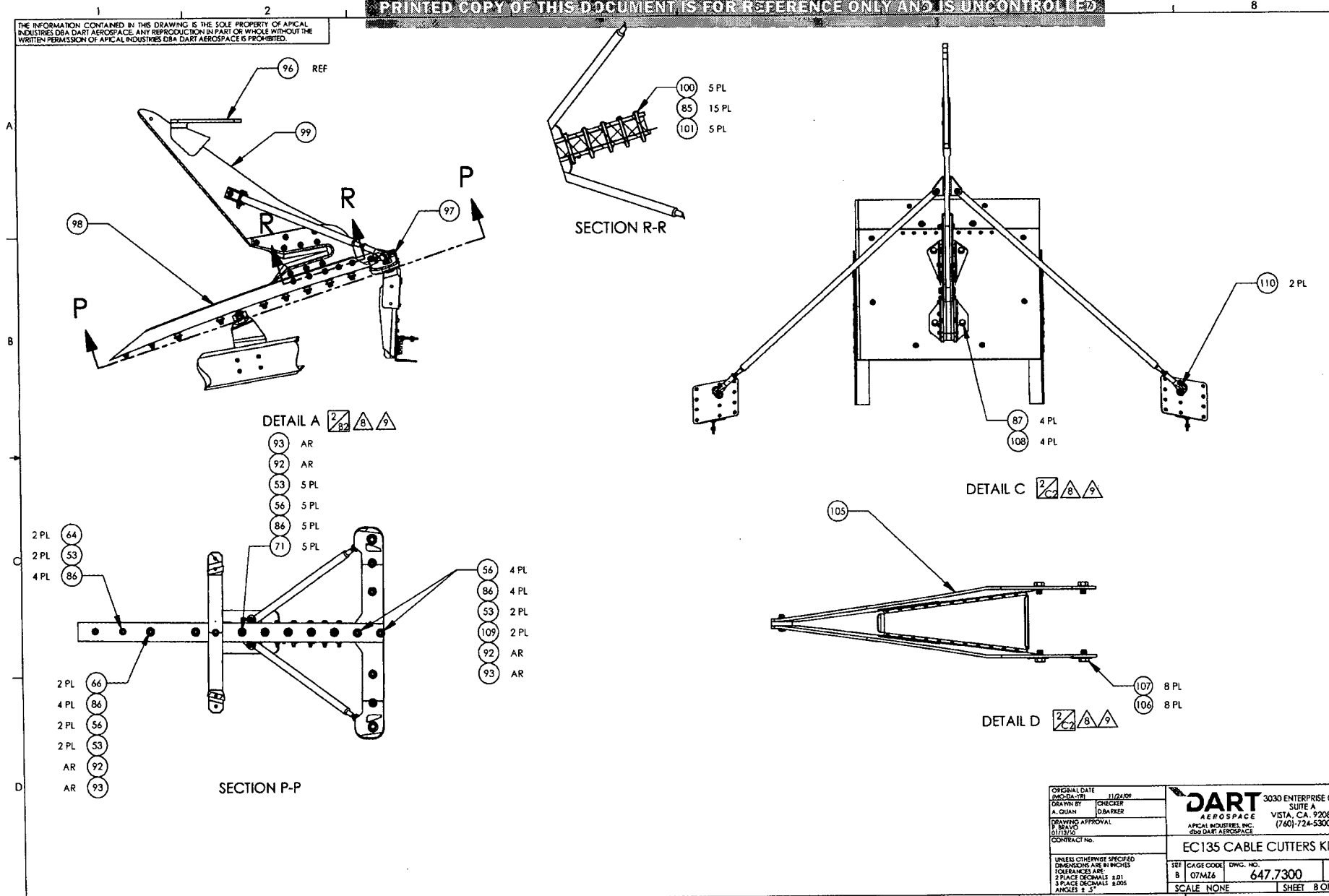


DETAIL D
TYP 2 PL

ORIGINAL DATE 11/24/09		 DART AEROSPACE APICAL INDUSTRIES INC. DBA DART AEROSPACE		3030 ENTERPRISE CT. SUITE A VISTA, CA 92081 (760) 724-5300	
DRAWN BY A. QUAY				CHECKED J. BARBER	
DRAWING APPROVAL P. BLAVO 01/13/10		EC135 CABLE CUTTERS KIT			
CONTRACT No.					
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005					
SHEET 8	CAGE CODE 07M26	DWG. NO. 647.7300	REV. B		
SCALE NONE		SHEET 7 OF 8			

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ORIGINAL DATE 01/24/09		3030 ENTERPRISE CT., SUITE A VISTA, CA 92081 (760) 724-5300	
DRAWN BY A. GUAN		D. BARKER	
DRAWING APPROVAL F. BRAVO 01/13/10		APICAL INDUSTRIES, INC. DBA DART AEROSPACE	
CONTRACT NO.		EC135 CABLE CUTTERS KIT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		REV B 07/MZG 647.7300	REV B
SCALE NONE		SHEET 8 OF 8	

David Duval

From: Jacob Becker
Sent: June-28-16 2:28 PM
To: David Duval; Andrea Beutler
Cc: Pablo Bravo; Jean-Luc Menard
Subject: RE: 647.7300

16 inches should be the cut length. I can add a note to the drawing.

Regards,

JACOB BECKER

Technical Support/Project Engineering

DART AEROSPACE

T 1 760 509-1639

F 1 760 758-9612

1-800-566-4166

Jacob

From: David Duval

Sent: Tuesday, June 28, 2016 8:07 AM

To: Jacob Becker <JBecker@dartaero.com>; Andrea Beutler <ABeutler@dartaero.com>

Cc: Pablo Bravo <pbravo@dartaero.com>; Jean-Luc Menard <jmenard@dartaero.com>

Subject: 647.7300

In the part list of 647.7300, find #36, P-seal it says qty1. What is the length that we need to cut it?

DAVID DUVAL

Production Engineering Coordinator

DART AEROSPACE

T 1 613 632-5200 > 234

F 1 613 632-5246

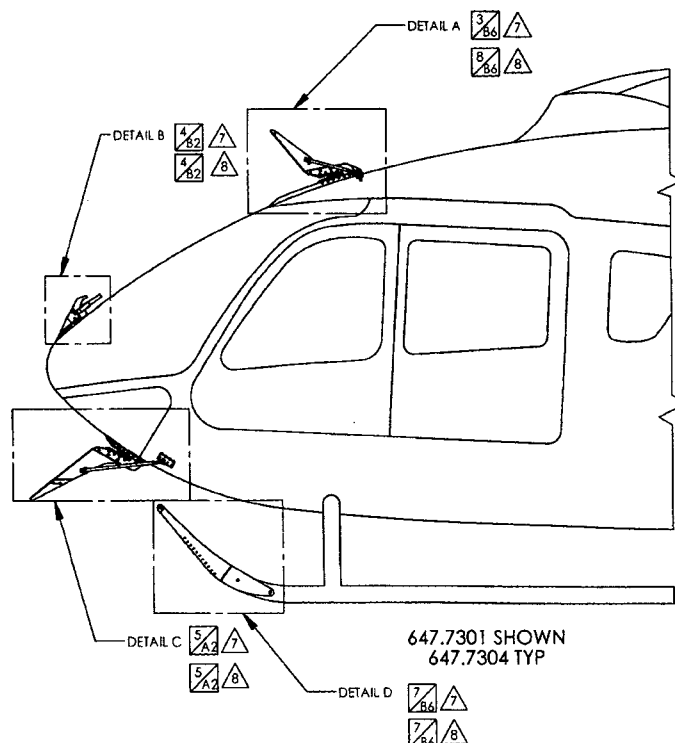
1 800 556- 4166

www.dartaerospace.com



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REFERENCE ONLY



2	2				110	601.3902	EYE BOLT		
2	2				109	601.2910	SCREW	MS27039-1-18	
4	4				108	601.3963	BOLT	93635A-212	
8	8				107	601.3654	BOLT	LN9037-08018	
8	8				106	601.3655	LOCK WASHER	LN9025-0820K	
2	2				105	647.1702	SKID DEFLECTOR ASSY		
8	8	8	8	104	601.3214	CHERRY RIVET		CR3333-5-5	
24	24		24	24	103	601.3213	CHERRY RIVET	CR3333-4-4	
4	4		4	4	102	601.3212	CHERRY RIVET	CR3333-4-3	
5	5				101	601.1541	LOCKNUT	MS21042106	
5	5				100	601.3962	SCREW	MS27031-0807	
1	1				99	647.1404	CUTTER ASSY (UPPER)		
1	1				98	647.2114	UPPER U CHANNEL		
1	1				97	647.7823	CROSS BRACKET AFT		
1	1	1	1	1	96	647.5701	GPS MOUNT KIT		
7306	7305	7304	7303	7302	7301	FIND #	PART #	DESCRIPTION	MATL SPEC

ORIGINAL DATE
11/04/09
DRAWN BY
A. QUAN
CHECKED
D. BARKER
DRAWING APPROVAL
P. BRAY
01/13/10
CONTROL NO.

DART 3030 ENTERPRISE CT., SUITE A
VISTA, CA, 92081
APICAL INDUSTRIES, INC.
(760)-724-5300
DBA DART AEROSPACE

EC135 CABLE CUTTERS KIT

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
2 PLACE DECIMALS ±.01
3 PLACE DECIMALS ±.005
ANGLES ±.5°

SHEET 2 OF 8
CAGE CODE 07M26
DWG. NO. 647.7300
SCALE NONE
REV. B

REFERENCE ONLY

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NOTES: UNLESS OTHERWISE SPECIFIED

- 1 AFTER INSTALLATION, APPLY F/N 90 A/R TO FILL GAPS AND FILLET EDGES.
- 2 APPLY F/N 91 TO FAYING SURFACES.
- 3 DELETED.
- 4 MATCH DRILL HOLES THROUGH F/N 26 or F/N 98 AND FUSELAGE.
- 5 SHIM GAP BETWEEN F/N 1 & 26 AS NEEDED.
- 6 AT CUSTOMERS OPTION, INSTALL F/N 96 BY MATCH DRILLING ONTO F/N 1 FOR KIT P/N 647.7301 or F/N 99 FOR KIT P/N 647.7304.
- 7 647.7301 INSTALLATION FOR EC135.
- 8 647.7304 INSTALLATION FOR EC135 T2/P2.
- 9 EXCEPT WHERE NOTED, INSTALLATION FOR 647.7304 SAME AS 647.7301.

REV.	DESCRIPTION	DATE	APPROVED
N/C	INITIAL RELEASE	01/13/09	P. BRAVO
A	INCORPORATED ECHS 02958, 03000, 03044, 03046	02/16/11	P. BRAVO
B	INCORPORATED ECHS 85325	03/09/16	P. BRAVO

REV.	DESCRIPTION	DATE	APPROVED
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REV.	DESCRIPTION	DATE	APPROVED
N/C	INITIAL RELEASE	01/13/09	P. BRAVO
A	INCORPORATED ECHS 02958, 03000, 03044, 03046	02/16/11	P. BRAVO
B	INCORPORATED ECHS 85325	03/09/16	P. BRAVO

REV.	DESCRIPTION	DATE	APPROVED
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3030 ENTERPRISE CT., SUITE A, VISTA, CA. 92081 (760)-724-5300

DART AEROSPACE

APICAL INDUSTRIES, INC. DBA DART AEROSPACE

EC135 CABLE CUTTERS KIT

SCALE: NONE SHEET 1 OF 8